# UNIVERSITY OF BOTSWANA



# **FACULITY OF EDUCATION**

# THE USE OF COMPLEMENTATRY AND ALTERNATIVE MEDICINE IN PSYCHIATRIC CARE IN KANYE AND GABORONE, BOTSWANA

A Special Research Proposal Project Submitted to the School of Graduate Studies

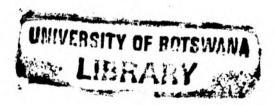
In Partial Fulfillment of the Degree of Master of Nursing Science

By

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May 2007

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# **APPROVAL PAGE**

This special research project has been examined and approved as meeting the required standard of scholarship for partial fulfillment of the requirement for the degree of Master of Nursing Science.

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# STATEMENT OF ORIGINALITY

The work contained in this project was completed by the Clark Kebaitse at the University of Botswana between January, 2007 and May, 2007. It is the original work except where due reference is made and neither has it been nor will it be submitted for the award of any other university. No part of this work should be reproduced without authorized permission of the owner.

Clark Kebaitse

# **DEDICATION**

This work is dedicated to my wife Kemoreng Kebaitse, my daughters Kamogelo and Galaletsang, and my mother Mokgarebe Kebaitse.

# **ACKNOWLEDGEMENTS**

I would like to acknowledge my research supervisor Dr M. B. Sabone for her patience and her guidance throughout this project.

My sincere gratitude goes to my wife Kemoreng Kebaitse and my daughters Kamogelo and Galaletsang for their support, encouragement, and understanding throughout the study period I would like to thank my mother Mokgarebe Kebaitse, my sister Mmasone Raamabya and my brother Baliki Kebaitse for always encouraging me to work hard.

A special thanks to my classmates for their support and encouragement throughout the study period.

Finally, I would like to thank all the staff of the Department of Nursing Education for their support and guidance throughout.

#### ABSTRACT

THE Use of Complementary and Alterative Medicine in Psychiatric Care in Kanye and Gaborone, Botswana

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The use of Complementary and Alternative medicine (CAM) in the treatment of psychiatric disorders has increased tremendously throughout the world in the past few decades. Patients use a wide range of CAM therapies mainly as complementary to conventional mental therapies rather than as an alternative. Although no empirical work on the use of CAM in psychiatric care in Botswana was found, anecdotal observations by the researcher during his clinical experience and interviews with some CAM practitioners revealed that the use of CAM in psychiatric care was prevalent in the country.

The purpose of this study is to explore and describe the use of CAM in Kanye and Gaborone, Botswana. Concepts from the Sunrise Model, level one of Leniniger's Cultural Care Theory will be used to guide the study. The study employs an explorative-descriptive design. A semi- structured interview guide will be used to collect data. Informants will be psychiatric patients, CAM practitioners and providers of conventional mental health services. Purposive and snowball techniques will be used to identify possible participants.

Descriptive statistics will be used to analyze demographic data while content analysis will be used to analyze the main study questions. The researcher hopes that findings of the study will assist mental health providers to come up with strategies that can be used to integrate CAM in the mental health services of the country.

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#### **CHAPTER I**

#### INTRODUCTION

# Background

The use of Complementary Alternative Medicine (CAM) is not a new phenomenon. Humans have used traditional therapies to prevent and treat ailments including mental health problems since time immemorial (Kenny, Muskin, Brown & Gerbarg, 2001; Shaikh & Hatcher, 2005). Hobbs (1998) observed that St-John's Wort was used by ancient Greeks to expel evil spirits or get rid of demons which were thought to cause mental illness at the time. He further noted that as early as 1876, St-John's Wort was used to treat depression and hysteria. Herbs such as rauwalfia and ginkgo are said to have been used to treat some mental problems some 3000 years ago (Gardner, 2002). Because the terms CAM and Traditional Medicine[TM] are often used interchangeably (World Health Organization [WHO], 2000), this is how they will be used in this study.

Although Complementary and Alternative Medicine has existed alongside conventional medicine for a long time, there has been a tremendous increase in its use in the last three decades or so, as people, especially those from the developed countries re-discovered its value (Alderman & Kiepfer, 2003; Eisenberg et al., 1998; Kneisl, Wilson & Trigoboff, 2004; Ng, Camacho, Simmons & Mathews, 2006; Saad, Azaizeh & Said, 2005; Tovey, Fillice de Barros, Luiz Hoehne & Carvalheira, 2006). According to Bodeker and Kronenberg (2000) and WHO (2002), more than half the population in developed countries uses CAM. In Switzerland, half of the population in that country indicated that they prefer health facilities that offer some form of CAM and that they wished CAM could be covered by basic health insurance (Wolf, Maxion-Bergenmann, Bornhoft, Mathiessen & Wolf, 2006).

In the field of psychiatry, as in the general practice, the use of CAM has been reported in a number of studies (Astin, 1998; Kessler et al., 2001; Kuruppuarachchi, 2004; Mamtani & Cimino, 2002; Unutzer et al., 2000). A national survey by Kessler et al. in the United States showed that 56% of the respondents with anxiety and 53% of those with depression used CAM to treat these disorders. On the other, Druss and Rosenheck (2000) argued that many of the people with mental disorders who use CAM have not been diagnosed by health workers and that the majority of the treated mental disorders were short-lived and mild cases.

The reviewed literature also showed that there is high concurrent use of CAM and conventional medicine among people with mental disorders (Astin, 1998; Kessler et al., 2001; Unutzer et al., 2000). For instance, Kessler et al., (2001) found that 65.9% and 66.7% of respondents with anxiety attacks and depression, respectively, who were seen by a conventional provider, reported using CAM as well. It can therefore be argued that many people with mental disorders who use CAM use it mainly as complementary to conventional therapies rather than as an alternative. Literature has also revealed that many of these people do not usually inform their conventional provider about their use of CAM, a practice that can be unsafe (Kenny et al., 2001; Shaikh & Hatcher, 2005; Weier & Beal, 2004). Failure to inform one's conventional provider about the use of CAM may increase the risks of treatment complications (Shaikh & Hatcher, 2005; Weier & Beal, 2004).

The situation in many developing countries is different from that of developed world.

According to WHO (2003), the majority of the population in the developing countries use CAM (Traditional Medicine, as the system is commonly referred to) to meet their primary health care needs, unlike in the developed world where CAM is used mainly as complementary to conventional medicine. Traditional medicine is reported to account for 40% of all health care

delivered in China, while in Chile and Colombia, the proportion of the population using CAM was estimated at 71% and 40%, respectively (WHO, 2002). In the same report by WHO, it was noted that 65% of the rural population in India uses traditional medicine for their primary health care needs. The figure is even higher in Africa where 80% of the continent's population is reportedly relying on traditional medicine for its primary health care needs (WHO, 2002). Mkhwanazi (1997) supported this by observing that in many African countries, traditional medicine and Western health delivery systems operate concurrently, even though they may differ in their ideologies.

The high usage of traditional medicine in developing countries is attributed to a number of factors including accessibility, affordability and the fact that the approach is congruent with the rest of the cultural system (Lee, Charn, Chew & Ng, 2004; Ngoma, Prince & Mann, 2003; Shaikh & Hatcher, 2005; WHO 2002). Another factor is that payment for TM may be in kind so that people who have no money can still pay (Ngoma et al., 2003). A study by Singh, Raidoo and Harries (2004) showed that 38. 5% of the Indian community in Chatsworth, South Africa uses various forms of TM. Light (2003) also observed that the use of traditional medicine is wide spread among the black population of South Africa. In Zimbabwe, Mukumbira (2000) reported that because of high cost of conventional medicine, many Zimbabweans are turning to traditional medicine for treatment of various health problems.

The high usage of traditional medicine in Africa includes its use in the prevention and treatment of mental disorders. For instance, Adesina (2000) observed that sedative herbs have been used and are still being used to calm down violent patients. A study by Ngoma et al. (2003) in Dar-Salaam, Tanzania showed that traditional medicine practitioners had treated more patients with mental disorders than conventional primary health care workers. In many African

countries, mental illness is often explained in cultural context, hence the use of traditional medicine to treat it (Kabir, Iliyasu, Abubakar & Aliyu, 2004; Ngoma et al., 2003; Peltzer, 1999).

In view of the important role played by traditional medicine, African Health Ministers adopted a resolution called *The African Regional Strategy on Traditional Medicine* in 2000 (WHO, 2005). The resolution called on African countries to promote traditional medicine in their health care systems. The resolution was later endorsed by African heads of states and governments in 2001. The leaders also declared the period 2001-2010 as *The Decade of African Traditional Medicine* (Gbodossou, Floyd & Katy, 2002). Among others things, the strategy called on the WHO Regional Director for Africa to develop guidelines that member countries could use to formulate and evaluate national policies on traditional medicine, to document the proven safety and efficacy of traditional medicine in member countries, and to advise countries regarding the relevant legislation on the practice of traditional medicine (WHO, 2005). A survey by WHO (2005) showed that only a few countries in Africa have since formulated national policies on traditional medicine. Botswana is among those countries that are yet to formulate their policies.

As it is the situation in many developing countries, many people in Botswana use traditional medicine in the treatment of a variety of ailments including mental illness (Ministry of Health, 1995). The National Health Policy therefore encourages collaboration between the traditional healers and modern health practitioners. Mental illness is still associated with witchcraft, unhappy ancestors, and supernatural powers, CAM practitioners are therefore believed to be better placed to treat mental disorders than conventional mental health practitioners. Traditional medicine practitioners use mainly herbs, animal products, inorganic

products, magic, and religion; and any of these approaches may be used alone or in combination.

Patients may be treated as individuals or as families.

Five traditional healers interviewed by the researcher confirmed that they were treating a number of people with mental disorders and reported that they cured most of such disorders.

They reported that some of the clients they were treating also used conventional medicine. Their charges ranged from P500.00 to P2500.00 (U\$79 to U\$400) depending on the nature of the illness. Livestock, especially cows, are often used for paying.

It is also worth noting that in Botswana, unlike in many third world countries, conventional medicine is almost accessible to everybody because it is highly subsidized. In the case of psychiatric care, for instance, outreach services are conducted in remote parts of the country to ensure equity in the provision of mental health services (Ministry of Health, 2003). Conventional medicine is provided free of charge to those who cannot pay the nominal fee. In fact, it is traditional medicine that is expensive in Botswana.

Although traditional medicine is used by many psychiatric patients and although it is endorsed by the government, there are a number of gaps to be addressed. These include the fact that no empirical data exist on the use of traditional medicine by psychiatric patients.

Furthermore, the mental health policy is silent on the use of TM in psychiatric care. In addition, the relationship between conventional health workers and traditional medicine practitioners is often characterized by mistrust. Findings of this study will lead to documentation of the use of CAM in psychiatric care and identification of areas of conflict between the two systems.

#### Statement of the Problem

Mental ill health is one of the biggest problems facing Botswana. The prevalence of mental disorders and psychosocial problems has been estimated at 3.7 % (Ministry of Health, 2003).

The Lobatse Mental Hospital (the main psychiatric hospital in the country) annual reports of 2003, 2004, and 2005 showed an upward trend in the number of patients admitted. The figures were 844, 847, and 914 for 2003, 2004, and 2005, respectively. In addition, the average bed occupancy per day was 250 against a bed capacity of 111 beds. These figures are high when one considers the fact that many patients with psychiatric problems go undiagnosed and unregistered especially in areas where there are no mental health workers. Ministry of Health (2003) predicts that the number of people with mental disorders will go up because of rapid urbanization which leads to, among others, breakdown of the traditional family support systems.

One contributing factor to the increasing number of patients with mental illness is the HIV/AIDS pandemic. The prevalence rate of the HIV in the country's general population was estimated at 17% as at end of 2005(Botswana AIDS Impact Survey 11 Popular Report, 2005). The Lobatse Mental Hospital reports of 2002- 2005 indicated that the average percentage of patients admitted with HIV related psychiatric problems during the period was about 6 percent. HIV/AIDS often leads to psychological stress, anxieties, suicide and depression associated with discrimination and stigma of the infected people, loss of family members and friends as well as breakdown of families (Kneisl, Wilson & Trigoboff, 2004; Ministry of Health, 2003). Besides psychosocial effects, HIV/AIDS directly invades the brain leading to problems such as delirium, dementia and other psychiatric disorders (Fontaine & Fletcher, 2003; Kneisl, Wilson & Trigoboff, 2004).

The government of Botswana came up with a number of initiatives aimed at addressing the escalating problem of mental illness in the country: Mental health services were decentralized in 1978 to take them to the people. Since 1984, the government has embarked on training of community mental health nurses (Seloilwe & Thupayagale-Tshweneagae, 2007). The

training is an 18 months program leading to a Diploma. As of 2006, 120 post-basic psychiatric nurses had been trained. These nurses are the backbone of the mental health care services in the country as the country has very few psychiatrists. They are responsible for implementing the mental health program of the country which, among other things, includes providing out-reach services to remote parts of the country. Outreach services therefore present an opportunity for nurses to collaborate with traditional medicine practitioners. However, it is disappointing that the curriculum does not cover collaboration with traditional medical practitioners as one might have expected.

The integration of mental health services into the general health system of the country was initiated in 1978 (Seloilwe & Thupayagale-Tshweneagae, 2007). Through this initiative, general health workers (doctors and nurses) are expected to see psychiatric patients in the general patient care settings, especially in areas where there are no mental health specialists. The integration of mental health care services provides an opportunity to recognize traditional medicine which has long upheld the holistic nature of health care. However, the initiative is not working well because of the reluctance to see psychiatric patients on the part of the general practitioners.

The government developed a National Policy on Mental Health in 2003. The policy "provides a framework for the incorporation of the objectives of the mental health program into the existing general health care services" (Ministry of Health, 2003, p.1). The positive thing about the mental health policy is that it emphasizes promotion of mental health in the country and advocates for the decentralization and integration of mental health services into general health services. It also emphasizes the provision of equitable access to mental health services to all Batswana. However, the policy is silent on the role traditional medicine in psychiatric care.

Lastly, a position of mental health coordinator in the Ministry of Health has been established (Seloilwe & Thupayagale- Tshweneagae, 2007). The officer's role is to coordinate and see to the smooth running of mental health services in the country.

Although the government has come up with programs aimed at tackling the mental health problems in the country, the widely prevalent stigma and discrimination of the mentally ill prevents patients from utilizing these services (Ministry of Health, 2003; Seloilwe & Thupayagale-Tshweneagae, 2007). The problem of stigma and discrimination of people with mental illness could be one reason why psychiatric patients prefer traditional medicine, because in the case of the latter, practitioners cannot be linked to specific diagnoses (Miller & Murray, 1998).

As some of the government initiatives have not been effective for reasons already mentioned, it is time that other forms of treatment are explored. Traditional medicine can be one such treatment modality especially that it is socially sanctioned and culturally acceptable. It can be exploited by encouraging the use of those therapies with proven safety and efficacy. In addition, it could be regulated to protect the public from unscrupulous people who may pose as traditional medicine practitioners when they are purely money makers. Despite the increasing popularity of CAM in psychiatric care worldwide and Botswana government's articulated support for incorporation of CAM in health care, not much progress has been made in the country in both service delivery and research. The purpose of this study is to explore and describe the use of CAM in psychiatric care in Kanye and Gaborone. Findings of the study will help improve collaboration between the two systems and reduce relapses and high rates of admissions.

#### Significance of the Study

The findings of the study could help health workers appreciate the important role played by traditional medicine in psychiatric care and enhance their collaboration with CAM practitioners. Patients may also feel free to talk to their health workers about their use of traditional medicine. This way, they can be taught and advised on how to go about using traditional medicine alongside conventional treatment.

Traditional medicine practitioners may come out and talk about their practice when they feel that their contribution is recognized and appreciated. This may clear mistrust between CAM practitioners and health workers and can lead to a better working relationship. Findings of the study will help the researcher to come up with recommendations towards incorporating CAM in the country's mental health policy.

# Purpose of the study

To explore and describe the usage of CAM in psychiatric care in Kanye and Gaborone

# **Specific Objectives**

- 1. To identify complementary therapies commonly used in psychiatric care in selected areas.
- 2. To establish possible reasons for psychiatric clients' use or non-use of CAM.
- 3. To ascertain the patterns of use of CAM by psychiatric clients.

#### **Research Questions**

- 1. What CAM therapies are commonly used in psychiatric care in Kanye and Gaborone?
- 2. What are the reasons for using or not using CAM in psychiatric care in Kanye and Gaborone?
- 3. What is the pattern of use of CAM in psychiatric care in Kanye and Gaborone?

### **Operational Definitions**

Complementary and Alternative Medicine/Traditional Medicine: A group of diverse medical and health care systems, practices and products that are not considered part of the conventional medicine

Psychiatric care: Modalities for preventing, managing, and treating psychosocial problems.

Commonly used CAM: These are CAM modalities that are reported to be frequently used by people with psychiatric disorders.

Conventional Treatment: Treatment modalities that have been taught in formal schools and that have been tested for efficiency through research and legally sanctioned to be used in public health services.

Pattern of use of CAM: The way CAM/TM is used i.e. reasons for using it or not using it, commonly used therapies or whether it is used alone or in combination with conventional mental health therapies.

#### **Conceptual Framework**

The study will be guided by concepts from the Cultural Care Theory of Madeleine Leininger. These concepts are from Level one of the Sunset Model. The theory espouses transcultural care that is aimed at providing care that is congruent with the culture of the people (Parker, 2001). The theory posits that nursing should always consider and take into account the cultural beliefs, caring behaviors as well as values of individuals, families and groups for it to provide effective, satisfying and culturally congruent care (Wesley, 1992). The theory further states that care always occurs in a cultural context and that culture exhibits diversity and universality. Nurses must therefore acknowledge and appreciate the cultural diversity if nursing care provided to clients is to be culturally appropriate (Kneisl, Wilson & Trigoboff, 2004). Furthermore, the theory states that every culture has folk medicine and conventional medicine and that these two need to be identified and incorporated in nursing care.

The goal of Leininger's theory is to identify ways of providing culturally congruent care to clients of diverse or similar cultures. Leininger proposes three modalities that nurses can use to provide culturally appropriate care. The modalities are: cultural care preservation/maintenance, cultural care accommodation/negotiations, and cultural repatterning.

Cultural care preservation/maintenance consists of those decisions and actions that preserve or maintain those cultural practices and values of a cultural group that help members of that group maintain their health or recover from illness. Cultural care accommodation or negotiations consist of decisions and actions that help clients in a specific group to adapt or negotiate a beneficial health status. Cultural care repatterning involves actions and decisions that help clients change their lifestyles for new or different patterns that are culturally meaningful, satisfying or supportive.

# Leininger and the Nursing Metaparadigm Concepts

Leininger has not specifically defined the four nursing metaparadigm concepts as it is usually the case with many nursing theorists. Instead, the concepts have been deduced from the conceptual definitions and assumptions of the theory (George, 1995).

#### Health

Health reflects the ability of individuals (or groups) to perform their daily role activities in culturally expressed, beneficial and patterned ways.

#### Nursing

Nursing assists, supports, facilitates, or enables individuals or groups to maintain or regain their well-being in culturally meaningful and beneficial ways, or helps people face handicaps or death.

#### Person

Leininger does not address the person as the beneficiary of nursing care as it is usually described in nursing theories. However, one can infer in the way she explains her theory that she concurs to the notion that a person is a beneficiary of nursing care. Leininger's views a person as a cultural being or a part of a large socio-cultural system.

#### Environment `

Instead of environment, Leiniger uses the term environmental context which includes events, situations, or particular experience that gives meaning to human expressions, interpretations, and social interactions in particular physical, ecological, sociopolitical and/or cultural settings.

#### The Sunrise Model

Leininger uses what she calls The Sunrise Model to illustrate the major components of her theory (Wesley, 1992). The model provides a guide for nurses to assess clients in order to provide culturally congruent care (George, 1995). The model depicts a rising sun with its rays

representing different components of the first level of the model and metaphorically illuminating the remaining 3 levels of the model. The model is depicted in figure 1.

#### Level 1

Level 1 is the most abstract of the model (Welsey, 1992). Within this level are components of culture, worldview and social structure factors. These components explain and influence care expressions, patterns, and practices leading to holistic health and well-being.

#### Level 2

Level 2 is concerned with the client who may be an individual, family, a group or an institution.

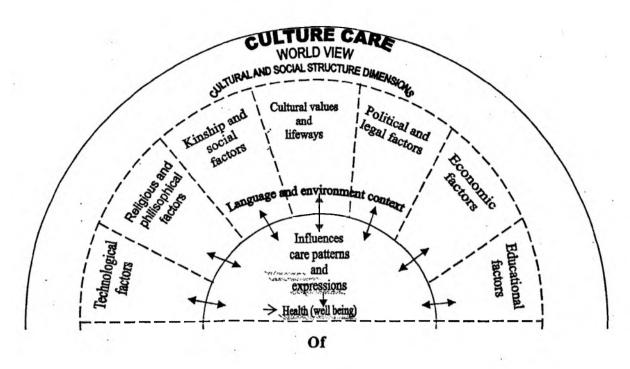
#### Level 3

Level presents information about folk medicine and conventional medicine available within a culture. The folk medicine and conventional medicine influence nursing care decisions and actions.

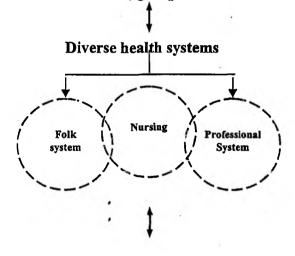
#### Level 4

Level 4 describes modalities that nurses can use to provide culturally congruent care namely cultural care preservation/maintenance, cultural care accommodation/
negotiations, and cultural repatterning

Figure 1. Leininger's Sunrise Model



Individuals, families, groups and institutions



Nursing care decisions and actions Cultural care preservation/maintenance Cultural care accommodation/negotiation Cultural care repatterning/restructuring

Culture congruent care

Influencers

Adopted from George, J. B. (1995)

#### The Sunrise Model Level 1 Concepts

As mentioned earlier on, level one has been chosen to guide this study. According to this level, a person's worldview, culture and social structure are major influencers of care expressions, patterns and health practices. Such major influencers need to be examined and understood by nurses (Parker, 201; George, 1995). The following discussion describes Leininger's major care influencers.

# Kinship and Social Factors

A person is a social being interacting with family and other members of the community.

Families have their own beliefs about health and illness that can influence the health expressions and health care practices of individual family members. The nurse must therefore always find out the role of the family in the care of a client. The health practices of the community affect individual community members. For example, availability of resources such as support system and the stability in the community can affect one's health care practices.

#### **Religion and Spiritual Factors**

People often follow health care practices that are congruent with their religions, personal values, and philosophies. For instance, a person whose religion does not accommodate modern health care practices may not use such services. Some religions may not allow their members to use traditional medicine. The nurse must always find out from clients if their religions allow certain health care practices so that culturally congruent decisions can be made.

# Technological Factors

Technology which can be in the form of electrical, mechanical, and physical also influence health care practices of people. Factors such as its availability, cultural appropriateness, and user friendliness will determine whether or not people use the technology.

#### Political and Legal Factors

Political and legal framework may support certain therapies and fail to support others. For instance, conventional therapies are legally accepted in Botswana while traditional medicine is to some extent politically accepted but not legally supported. Politico-legal climate may prevent or suppress the expression of health care practices.

#### Cultural Values and Lifeways

Each culture has its own beliefs about health and illness and very often people engage in health care practices that are in harmony with their culture. For instance, many Batswana still believe in cultural explanations of disease causations and use folk medicine to treat many ailments. A culturally congruent nurse must always find out what clients believe about their health care practices and treatments so that their preferences can be incorporated in their treatment plans.

#### **Economic Factors**

People who are economically well off may afford medical insurances which enable them to use a wide variety of therapies. On the other hand, those who are poor may afford only a limited variety.

#### **Educational Factors**

People of different educational levels have different worldviews and different beliefs about health and illness. This influences their health care practices. For example, young people often do not ascribe to cultural explanations of disease causations. Many of them may health care practices for the treatment of their health problems, preferring the scientifically proven conventional therapies.

# **Environmental Factors**

Environmental factors refer to the totality of one's living context within a geographic or ecological area. It may influence health care practices in many ways. The availability of certain treatment modalities in a given locality, the accessibility of such modalities to members of a community and the attitudes of service providers will determine the extent to which people use such services.

#### Application of Sunrise Model Level 1 Concepts to the Study

# Pattern of Use CAM as Leininger's care influences and patterns

The pattern of the use of CAM entails the manner in which people with psychiatric disorders use CAM. Issues such as whether or not people with psychiatric disorders use CAM, reasons for using it or not using, common CAM therapies used, and whether they use CAM solely or combination with conventional mental therapies fall under patterns of CAM use.

Factors Influencing the Pattern of CAM Use in Psychiatric Care as leininger's cultural and social structure demensions

Leininger identified worldview, cultural, and social factor as influencers of care expressions, patterns and practices. However, reviewed literature revealed that only some of such factors may be salient to the Botswana context. The more salient factors found to be relevant as influencing patterns of use of CAM in this study include: socio-economic status, educational status, age gender, locality, and church affiliation. Though discussed separately, these factors are interrelated.

#### Socio-Economic Status

A person's socioeconomic status determines whether that person uses CAM or not. The socioeconomic status of the service user and the fees for service will determine the patient's preferred provider.

#### **Educational Status**

Education is one of the factors influencing the use of CAM. Educated psychiatric patients may use CAM therapies that are not indigenous to the country such as nutritional supplements, vitamins etc which are often sold in pharmacies while less educated one's may use indigenous one's such as herbs and other home remedies.

#### Gender

Male psychiatric patients may use CAM probably because men generally do not like going to health facilities, or because many men have economic power to buy CAM as they are working or have livestock. On the other hand, women may use CAM because they are more health conscious than men. In addition, women may become familiar with CAM during their care giving role and therefore become inclined to use it. On the other hand, one may argue that many Botswana women may not be using CAM because of economic reasons. Many women in the country are poor which may make CAM unaffordable. Culturally, married women or those with partners cannot consult traditional medical practitioners without getting permission from their husbands or partners as this may land them in trouble. For example, a husband may simple refuse to pay the practitioner.

#### Age

Older people may use traditional medicine because they still use superstitious explanations about the causes and treatment of mental illnesses. On the other hand, young people may use CAM because many of them are working and have economic power to pay for it. Many young people are also educated which exposes them to a wide variety of CAM therapies.

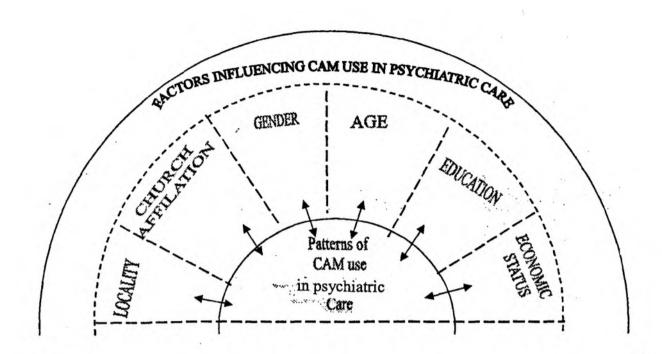
#### Locality

People in rural areas may hold different beliefs from those in urban settings. Such beliefs may influence their preference for certain treatment modalities. Locality may also determine what forms of treatment are available or the choices that are available to clients.

#### **Church Affiliation**

Certain churches may prohibit the use of traditional medicine by its followers. Some churches may actually be healing churches using herbs, prayers, holy water, and similar modalites.

Figure 2. Application of the Sunset Model to CAM Use in Psychiatric Care



# **Summary**

Although the use of CAM in the treatment of psychiatric diseases has increased tremendously in the past few years, very little is documented about the situation in Botswana. Furthermore, even though Botswana government has articulated support for the integration of the traditional and modern systems of health care, not much progress has been made. The purpose of this study is to explore and describe the use of CAM in psychiatric care in Kanye and Gaborone. Findings of the study will help improve collaboration between the two systems. The conceptual framework for the study will be provided by concepts from Leininger's Cultural Care Theory, and these include (a) care influences and patterns, and (b) cultural and social structure dimensions.

#### CHAPTER TWO

#### Literature Review

#### Introduction

The chapter presents reviewed literature on the topic "use of CAM in psychiatric care." The literature covers patterns of CAM use globally, regionally and locally. It also covers factors influencing patterns of CAM use particularly those that have been found relevant in the context of this study. Lastly, gaps identified in the reviewed literature will be highlighted, and the researcher provides a plan of how the proposed study will address some of the gaps.

#### Pattern of CAM Use

A number of researchers have studied the use of CAM among people with mental disorders and found that the modality was widely used, often in conjunction with conventional treatment modalities.

Unutzer et al. (2000) conducted a survey among 9,585 adult Americans using data from a national household telephone survey of 1997-1998. The sample was randomly selected and representative of American population. The study examined the use of CAM in mental health. The results indicated that 16.5% of the respondents reported using CAM during the 12 months period preceding the survey. Of these, 21.3% met diagnostic criteria for at least one mental disorder. The results also indicated that the use of CAM was particularly common among patients with depression and those with panic attacks. Respondents who reported using CAM were also likely to use conventional mental health services. The strength of this study is that it used a representative sample which was randomly selected thus making the results generalizable to the target population.

Kessler et al. (2001) carried out a survey on the use of CAM therapies to treat anxiety and depression in the United States (US). Data came from a nationally representative sample of 2,055 respondents who provided information on the use of 24 CAM therapies for the treatment of mental and physical conditions among the general population. The results showed that a total of 9.4% of the respondents suffered from anxiety attacks in the past 12 months while a further 7.2% reported severe depression. More than half of the respondents among both anxiety and depression sufferers reported using CAM to treat those disorders during the past 12 months.

Twenty percent of those with anxiety attacks and 19.3% of depression sufferers visited a complementary and alternative therapist. A total of 65.9% of the respondents seen by a conventional provider for anxiety attacks and 66.7% of those seen by a conventional provider for severe depression also reported using CAM to treat those conditions.

Druss and Rosenhech (2000) conducted a survey to estimate the use of practitioner-based CAM treatments in the United States of America. Data were collected from 16,038 respondents who took part in the Medical Expenditure Panel Survey of 1996 that covered 12 complementary medical services. The results indicted that 9.8% of those reporting a mental condition made a visit to a complementary therapist and that half of the visits were for the treatment of mental conditions. Persons reporting transient stress adjustment disorders were more likely to use CAM therapies to treat such conditions than those with psychotic and affective disorders.

Ng et al. (2006) carried out a study to examine the frequency and type of CAM used by 453 rural psychiatric outpatients of two ethnic groups in the United States. They found that 40% of the respondents used some form of complementary therapies particularly to treat psychiatric symptoms.

Patients with mental disorders use an assortment of CAM therapies, with the use of spiritual healing/prayers observed across many studies (Brown, Wohlheiter & Dixon, 2003; Druss & Rosenheck, 2000; Kessler et al., 2001; Russinova, Wewiorski & Cash, 2002).

Alderman and Kiepfer (2003) carried out a study to investigate complementary medicine usage among patients treated in Australian psychiatric unit and to assess fundamental attitudes and beliefs regarding complementary medicine in the study cohort. Structured interviews were administered to 52 patients to obtain details of the extent of complementary therapy use, usage patterns, reasons for use, and general perceptions about complementary medicine. The results showed that 85 complementary treatments had been used by 51.9% of the respondents during the preceding six months. The most common products were vitamins, minerals, and herbal preparation.

Russinova et al. (2002) conducted a survey in Boston, United States to find out the perceived benefits of alternative health care practices by adults with serious mental illness. The sample size was 157 participants and it was selected from a larger exploratory study on the role of such practices in mental health. The results indicated that 86% of the respondents identified multiple alternative health care practices as beneficial to their mental health with the most frequently reported practices being religion/spiritual activities (50%), meditation (43%), massage (31%), yoga (20%), guided imagery (18), herbs (16%), chiropractic (13%), and nutritional supplements (13%).

A study by Kessler et al. (2001) showed that the most commonly used CAM therapies were relaxation techniques followed by spiritual healing. A study by Matthews, Camacho, Lawson and Dimsdale (2003) to document the use rates of herbal medication among a population of psychiatric outpatients and to identify risks for drug-herb interactions showed that 15% of the

200 respondents were current users of herbs while 47% were previous users. Of the current users, 59 % used herbs to improve their overall mental health. Roy-Byrne et al. (2005) conducted a study to examine the use of herbal medicine in a group of primary care patients with symptoms of anxiety and depression. Participants were recruited from three university affiliated primary care clinics in Seattle, San Diego and Los-Angeles. The Month International Diagnostic Interview was used to collect data from 682 patients aged between 18 and 70 years. The results showed that the rate of use of herbal medicine was 11%. Furthermore, 36% of those using herbs were also taking psychotropic medications.

Persons with mental disorders use CAM for various reasons. Rickhi et al. (2003) carried out a study in Canada to compare patients with and without mental disorders who sought services from a complementary practitioner with regard to quality of life and reasons for seeking complementary therapies. Data were collected from 826 new patients attending acupuncture clinic using a self-administered questionnaire. The results indicated that 70% of the respondents presented with a mental disorder, with their major reasons for choosing complementary therapies being personal preference, interest, belief in complementary therapies or resort to complementary therapies when all else had not worked.

Wu et al. (2007) carried out a survey to examine patterns of and reasons for the use of CAM therapies among women with depression. Data analyzed were from a cross-sectional telephone survey of women aged 18 years and older living in the United States. The sample size was 220 women of multiple ethnicities. The results indicated that 54% of the respondents had used CAM in the past year. Reasons for using CAM were unpleasant side effects of conventional medicine (45%), failure of conventional medicine to work (43%), recommendation by physicians (33%), and the high cost of conventional medicine (17%). In two related studies,

mentally ill patients reported that they were more satisfied with CAM than conventional medicine (Alderman and Kiepfer, 2003; Unutzer et al., 2000).

In Africa, research has also reported significant use of CAM by people with mental disorders. Ngoma et al. (2003) conducted a cross-sectional study of patients in two health care settings in Ilala district of Dar-es-Salaam, Tanzania. The aim of the study was to compare the characteristics of patients attending primary health care clinics and those using traditional healer centers. The researchers found that twice the numbers of patients with mental disorders were seen at traditional healer centers than at primary health centers. Although the researchers studied diverse types of healers, they did not indicate the types that were commonly used by patients.

Peltzer (1999) conducted a study to investigate the contribution of faith healers towards mental health in the Northern Province, South Africa. The sample consisted of 88 faith healers drawn from the Apostolic and Zion churches in the area, who responded to a semi-structured interview. The results showed that the most common illnesses treated by faith healers were among others, mental disorders and substance abuse.

In another study, Danesi and Adetunji (1994) conducted a study in Lagos University Hospital to evaluate the use of alternative treatment methods by persons with epilepsy who had used these forms of treatment before seeking hospital treatment. The results indicate that out of the 720 interviewed, 265 patients were using CAM and continued using it even after seeking conventional medical treatment.

Although no study on the use of CAM by patients with mental disorders in Botswana was found, the use of CAM in the treatment of mental health disorders was reported to be common. Some CAM practitioners interviewed by the researcher in Lotlhakane East and Molepolole reported that they consulted many patients with mental disorders. Two practitioners

the researcher interviewed in Lolthakane East on the 12<sup>th</sup> of January, 2007 reported that they specialized in child conditions specially epilepsy, while three who were interviewed in Molepolole whom the researcher talked to on the 3<sup>rd</sup> of February, 2007 said they could treat any form of mental problems.

Psychiatric nurses interviewed by the researcher also confirmed that there was a considerable use of CAM by patients with mental disorders. The nurse in Mahalapye whom the researcher talked to on the 13 the February, 2007 said "people in the area especially in Tswapong use traditional medicine to treat mental disorders, and that they use mainly faith healing as many of them were members of the Zion Christian Church." On the 15<sup>th</sup> February, 2007, the researcher talked to two nurses in Lobatse and this is what they said "many patients admit using traditional medicine and some other patients often request to be discharged from the Mental Hospital so that they could go and consult CAM practitioners." In addition, the nurses reported that patients often used traditional medicine together with conventional mental health treatments.

Spiritual healing and traditional medicine seem to be the two commonly used CAM therapies in Africa. Danesi and Adetunji (1994) found that of the 265 patients who reported using alternative treatments in their study, 47.6% used herbs alone, 24.1% combined herbs with spiritual healing, while a further 22.4% used spiritual healing alone.

Kabir et al. (2004) conducted a study to examine the knowledge of, beliefs about causes and treatments of mental illness among adults in a Northern Nigeria rural community. The results indicated that 34% of the respondents preferred spiritual healing for the treatment of mental illness while a further 18% preferred the use of herbs.

In Botswana, no empirical work on the use of CAM in the treatment of mental health disorders was found, anecdoted observations by the researcher's during his own clinical

experience and interview with relatives of mentally ill patients revealed that herbs and prayers were the commonest forms of traditional medicine used in Botswana. This is probably because herbs and spiritual healing are widely available throughout the country. Another reason why prayer healing is common may be because it costs only a nominal fee, if not provided free of charge.

Very little was found on the reason for the use of CAM in Africa. However, in their study, Danesi and Adetunji (1994) reported that 86.1% of the respondents indicated that they used CAM because it was recommended by relatives, friends or neighbors

# Factors Influencing Patterns of CAM Use in Mental Health Disorders

There are many factors that influence pattern of CAM use, with some of such factors overlapping. Factors that have been found to be salient in both the reviewed literature and the context of the present study include gender, age, education, socio-economic status, church affiliation, and locality.

### Gender

Women seem to be using CAM more than men. Studies by Russinova et al. (2000), Druss and Rosenheck (2000) and Rickhi et al. (2003) showed that the use of CAM was higher in women than in men. In Africa, Ngoma et al. (2003) and Danesi and Adetunji (1994) also found that CAM use was common in women. However, these studies did not indicate therapies commonly used by women nor give possible reasons for the high use of CAM by women. Arcury et al. (2006) speculated that women could be using CAM more than men because they are generally more health conscious than men and are inclined to seek alternative forms of treatments for their conditions. Another possible reason could be that women as care givers become acquainted with CAM in their family care giving.

# Age

There are inconsistent reports on the influence of age in the use of CAM; with some studies indicating that use of CAM is common among young people while others reporting that it is common among middle aged people. Dein and Sembhi (2001) carried out a study to examine the use of traditional medicine healing among South Asian psychiatric patients in the London Borough Waltham Forest. The sample was 25 patients aged between 24 and 64 years. The researchers found that 28% of the respondents had used a traditional healer during the psychiatric illness and that traditional medicine use was common among patients less than 40 years of age. Another study by Druss and Rosenheck (2000) also showed that CAM was common among young patients. On the other hand, studies by Rickhi et al (2003), Russinova et al. (2002) and Unutzer et al. (2000) showed that use of CAM was common in people who were in their 40s. However, the studies did not indicate the types of CAM therapies used by young people or by middle aged people. One may argue that the young and middle aged people are within the productive age groups are probably working, hence their high use of CAM as they can afford to pay for it.

Although no studies on the influence of age on the use of CAM were found in Botswana, five elderly patients the researcher spoke to in Molepolole noted that many elderly people use traditional medicine than do young. This may be due to the fact that many old people still attribute mental illness to cultural explanations.

#### **Education**

Higher education seems to be associated with higher use of CAM. Wu et al. (2007) found that the rates of CAM use increased with educational level. Other studies also showed that CAM use was common among people with higher education (Dein & Sembhi, 2001; Roy-Byrne et al.,

2005; Russinova et al., 2002; Unutzer et al., 2000). In Africa, a study by Ngoma et al. (2003) in Tanzania showed that CAM use was common among patients with high education. However, Danesi and Adetunji (1994) found that a higher percentage of alternative medicine users were illiterate.

None of these studies indicated the types of CAM therapies used either by higher educated people or those with low educational level or explain the reason for the high usage of CAM among educated people. Arcury et al. (2006) argued that education as a socio-economic indicator may mean that people with high educational achievement may be working therefore having economic power to buy CAM. Arcury et al further observed that lack of or low education as a socio-economic indicator could result in less access to conventional medicine thereby resorting to CAM (Arcury et al., 2006). Astin (1998) speculated that educated people may be using CAM because they read widely and get exposed to different forms of therapies other than the native ones. Furthermore, Astin argues that educated people read about their conditions and various forms of treatment available for them.

Although no studies on the influence of education on CAM use were found in Botswana, the researcher's experience is that it is used by both the highly educated and those with low education, the former use therapies such as exercise, vitamins, and prayers while the latter use mainly indigenous modalities.

#### Socio-Economic Status

There seems to be an association of one's socioeconomic status and the use of CAM. Wu et al. (2007) found that the use of CAM was common among employed people. A study by Russinova et al. (2002) showed that 39% of the respondents who used CAM were employed full-time while

a further 24% were employed part-time. Rickhi et al. (2003) also found that 46.2% of the respondents who used CAM were professionals while laborers accounted for 22.7%.

Ngoma et al. (2003) argued that people with mental disorders who visited CAM practitioners were employed or were saving money. It can be argued that people with high socio-economic status use CAM because they have the financial muscle to pay for it (Dein & Sembhi, 2001). Reviewed studies have not differentiated the types of CAM according to one's socio-economic status.

In Botswana, traditional medicine has been associated with rural areas where many people are of low socio-economic status. However, the trend seems to be changing with increasing working people using traditional medicine for various health problems including mental illness. Even CAM practitioners seem to be targeting the people working class judging by the high advertisement they place in local newspapers which are often accessible only to the literate and working class.

# Locality

Locality may determine the choices of treatment that are available to clients. For instance, WHO (2002) and Ngoma et al. (2003) attributed the high usage of CAM in many developing countries to, among others, the fact that it is the only form of treatment available to people. In addition, people in rural areas may hold different beliefs from those held in urban settings. Such beliefs may influence their preferences of certain treatment modalities. A study by Kabir et al (2004) showed that 19% and 18% of the respondents attributed mental illness to divine wrath and magic/spirit possession, respectively, hence their preference for traditional medicine over conventional therapies for the treatment of psychiatric disorders. Similarly, a study by Peltzer

(1999) showed that respondents used CAM to treat mental illness because they attributed its causes to cultural explanations.

#### **Church Affiliations**

Certain churches prohibit the use of traditional medicine by their followers. Ngoma et al. (2003) observed that a church in Tanzania rejected the use of TM. Some churches may actually be healing churches using herbs, prayers, holy water, and similar modalities. Peltzer (1999) noted that Zionist and Apostolic churches use herbs in addition to holy water, prayers, and holy wool.

In Botswana, mental illness is also explained in terms of witchcraft, and unhappy ancestors. Many people therefore use traditional medicine to treat mental disorders. Four elderly patients the researcher talked with in Kanye said "bolwetsi jwa tlhalogonyo ke ditirwa tsa setswana" meaning mental illness is caused by witchcraft hence, the need to treat it traditionally.

### Summary

The chapter provided literature review on the use of CAM in psychiatric care. It is evident from the reviewed literature that people with mental disorders use CAM for the treatment of such disorders. The reviewed literature showed that CAM is often used in combination with conventional mental health treatments. The reviewed literature also revealed that the use of CAM is common among women and that many CAM users had higher education.

Although the reviewed literature shed light into the use of CAM in psychiatric care, studies conducted so far have some limitations that the proposed study will attempt to address. Most the studies were conducted in developed countries especially the United States of America, and thus their findings cannot be generalized to developing country. Informants in most of the reviewed studies were limited to users of CAM leaving out important stakeholders like practitioners of CAM and conventional health care providers.

The proposed study will be in Botswana, a developing country in Africa. The study will incorporate both CAM practitioners and users. Moreover, conventional practitioners will also be recruited so as to get an impression of their perception of CAM use that may influence what their clients choose. The study will also shed some light into the working relationship between conventional mental health care providers and CAM practitioners.

### **CHAPTER THREE**

#### **STUDY METHODS**

#### Introduction

The chapter is comprised of procedures that will be followed to carry out the study. These include research design, the study setting, study population, the sampling technique, sample size, data collection tool and its pilot testing, method of collecting the data, ethical considerations, establishing rigor, plan for data analysis and limitation of the study.

#### Research design

An explorative-descriptive design will be used for the study. The explorative-descriptive design is used when little is known about the phenomenon under study (Strauss & Corbin, 1998).

According to Strauss and Corbin (1998), the design provides an opportunity for the researcher to explore and examine all aspects of the problem under study. The reviewed literature has revealed little on the use of CAM in psychiatric care in Botswana, an exploratory design will enable the researcher to explore and describe CAM use in psychiatric care in the country in depth.

# **Research Setting**

The study will be undertaken in Kanye and Gaborone. Kanye, a rural area lies in the southern part of Botswana and is the headquarters of the southern District. It is one of the biggest villages in the country with a population of 46,280 (Central Statistics Office, 2004). Kanye has five health clinics which provide preventative, promotion, curative and rehabilitative services. There is also a general hospital (Seven Day Adventist Hospital) run by Seven Day Adventist Church which provides curative care. Seventh Day Adventist hospital is also a teaching hospital for nursing programs. The hospital provides psychiatric services within the out-patient department.

Psychiatric patients who cannot be managed in the hospital are referred to the main referral psychiatric hospital in Lobatse some 50 km east of Kanye.

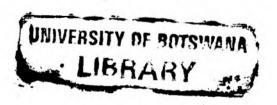
Gaborone is the administrative as well as business capital of Botswana. It has a population of 186,000 people (Central Statistics Office, 2004) of diverse cultural backgrounds. Gaborone has ten council health clinics providing preventative, promotion, curative and rehabilitative services. Gaborone also has two hospitals namely Gaborone Private Hospital which provides curative services. Princess Marina Hospital (a government hospital) is the main referral hospital in the southern part of the country which also provides curative services. It also serves as a teaching hospital for various health disciplines. The hospital has a psychiatric unit run by psychiatric nurses which provides services to outpatients. Patients who cannot be managed at the unit level are referred to the main psychiatric hospital in Lobatse some 80 km south of Gaborone.

# Population and Sampling

# **Population**

Participants for the study will be selected from psychiatric patients, CAM practitioners and conventional mental health providers. Inclusion criteria for patients are:

- A diagnosis of psychiatric illness by a conventional medical practitioner for at least
   1year.
- o Age of at least 21 years. This is the age at which a person can consent for self in Botswana
- o Community dwellers (not institutionalized)
- o CAM practitioners must have practiced in Botswana for at least 5 years



O Conventional mental health care providers must have worked with psychiatric patients in Botswana for at least 3 years.

# Exclusion criteria

- o Psychotic patients as they may not be able to comprehend the study.
- o Persons who are either CAM practitioners or conventional mental health care providers but have also been diagnosed with psychiatric illness.

# Sampling

Purposeful and snowball techniques which are both non-probability sampling techniques will be used to recruit participants to the study. Snowball technique will particularly be used to sample CAM practitioners as these may not be easy to find. Purposeful technique involves "conscious selection by the researcher of certain subjects or elements to include in the study" (Burns & Grove, 2001, p. 376). The researcher will select only subjects he/she thinks are knowledgeable about the issue under study. Burns and Grove further noted that the technique is often used as a way to get some beginning ideas about an area not easily examined using other sampling techniques as it is the case in this study.

In snowballing technique, early sample members are asked to identify and refer other people who meet the eligibility criteria, and this continues until the sample size is reached (Polit & Beck, 2004). The technique is based on the fact that people with similar traits or characteristics know each other (Burns & Grove, 2001). It is used when the researcher knows that potential participants exist in the general population but cannot locate them.

#### Sample Size

According to Polit, Beck and Hungler (2001, p.248), "there are no firmly established criteria or rules for sample size in qualitative research." Rather, the sample size depends on a number of

factors, among them, the purpose of the study, the quality of informants, and the sampling technique used. The sample size for qualitative research depends on data saturation (Polit & Beck, 2004). Data saturation refers to sampling to the point at which no new information is obtained and redundancy is achieved (Polit & Beck, 2004). Data saturation will therefore be used as a guiding principle for the sample size in this study

#### **Data Collection Tool**

The instrument for data collection will be a semi-structured interview guide specially developed by the researcher. The interview guide will have two sections. Section A will comprise sociodemographic characteristics of participants which will include age, gender, education, employment status, church affiliation, locality, duration of illness, cadre of conventional mental health care providers and their years of experience in working with mentally ill patients, years of experience for CAM providers, variety of CAM practitioners, and their years of residence in Botswana.

Section B will be made up of open ended questions to allow for an in-depth exploration of the use of CAM in psychiatric care. Interview with open-ended questions allows respondents to respond in their own words thereby giving more detailed information (Polit & Hungler, 1999). The interview guide will be informed by the reviewed literature and will be translated from English to Setswana.

#### Pilot Test of the Data Collection Tool

Burns and Grove (2001, p. 806) defined pilot test as "a smaller version of a proposed study conducted to develop and/or refine methodology, such as the treatment, instruments, or data collection process." In this study, the pilot test will be conducted to refine data collection tool and to estimate the duration of the interview. The tool will be tested in Gaborone on 2 patients (a

female and a male), one traditional medicine practitioner and one conventional mental health provider. Burns and Grove (2001) and Polit et al. (2001) noted that pilot test should be conducted on persons who are similar to those who will eventually participate in the study. Participants who will participate in the pilot-test will not be included in the main study.

# **Recruitment of Study Participants**

In the case of patients, the researcher will communicate the study to the unit staff both verbally and in writing explaining its purpose including the eligibility criteria. In Gaborone, the researcher will then approach patients individually while they are waiting to be seen and introduce the study to them. For those interested in participating in the study, a brief interview will be done to see whether they meet eligibility criteria. The researcher will then get the contact details of patients and schedule appointments for informed consent and interviews.

In Kanye, a brief introduction to the study will be done to hospital staff with the aid of a short written synopsis about the study and its eligibility criteria. Potential participants will be captured through the use of a patient contact form that will be entrusted to hospital staff to fill on behalf of the researcher. The researcher will collect the forms later and follow patients who have expressed interest in participating in the study and make appointments for informed consent and interview.

For CAM practitioners, key people in the community such as family welfare educators, social workers, village development committee members and councilors will be approached to assist in the location of CAM practitioners. The researcher will then approach the located CAM practitioners and brief them about the study and ask them for their participation in the study.

Through the officer-in charge of the psychiatric unit in Gaborone, the researcher will inform staff about the study soliciting their participation. Contact details of those interested and

meeting eligibility criteria will then be taken and appointments for consent and interview will be set. Through the hospital superintendent, the researcher will talk to the staff at the Seventh Day Adventist Hospital (at Outpatient Department) informing them about the study and asking for their participation. Contact details of those interested and meeting eligibility criteria will then be taken and appointments for consent and interview will be set. An effort will be made to have different cadres of conventional mental health providers, patients of different diagnoses and a variety of CAM practitioners.

#### **Data Collection**

The researcher will collect the data himself through face-to-face interviews. For patients and traditional medicine practitioners, data will be collected in participants' own homes, and in the case of conventional mental health providers, data will be collected in hospitals. It is important for patients and traditional medicine practitioners to be interviewed away from health facilities as this may help them to feel free and talk openly about CAM. Upon arrival at a participant home, the researcher will first establish if a potential participant is still willing to participant in the study. Participants will be taken through the consent form and if they agree to participate, they will be asked to sign a written consent form or append their right thumbs if they cannot write. Following a written informed consent from participant, the interview will commence, starting with the demographic characteristics. Doing the demographic characteristics first establishes rapport, so that when the main study questions are addressed, a participant will be relaxed. The researcher will ensure that all questions are covered, and will probe for information or clarification and validation of responses (Polit et al., 2001; LoBiondo-Wood & Haber, 1998).

The researcher will also carry a reflective dairy to record any pertinent issues that may transpire during interviews.

The researcher will tape-record interviews if participants agree. For participants who do not want the interview to be tape-recorded, the researcher will rely on interview notes. Holloway and Wheeler (1996) argued that a tape recorder allows the researcher to capture the entire dialogue and to pay undivided attention to the participant. The researcher will also observed for non-verbal cues and note them.

# **Establishing Trustworthiness**

In qualitative research, the quality of data and findings have to be evaluated for trustworthiness (Meyers & Sylvester, 2006). Lincoln and Guba (1985) have suggested several strategies that can be used to ensure trustworthiness in qualitative studies which include; triangulation, peer debriefing, member checking, inquiry audit and a thick description of the context. In this study, trustworthiness will be established by informants' triangulation, member checking, inquiry audit and thick description of the context.

# Informants' Triangulation

Informants' triangulation refers to collecting data from different sources about the same issue. In this study, data will be collected from patients, traditional medicine practitioners and mental health service providers. Informants' triangulation enhances credibility of the study.

# Member checking

Member checking is a method of validating the credibility of qualitative data through checking the researcher's interpretation of the responses with informants (Polit & Hungler, 1999). In this study, member check will be done by providing feedback to the participants before finalizing analysis to check whether the findings reflect what they said. Like triangulation, member checking also enhances credibility of the study (Lincoln and Guba in Polit et al., 2001).

# Peer Debriefing

Peer debriefing is another strategy that enhances credibility. Peer debriefing refers to engaging one or more colleagues in the review and exploration of various aspects of the inquiry such as raw data and data reduction product to check whether the data findings are credible (Polit and Beck, 2004). In this study, the researcher will be working with a research supervisor who is experienced in qualitative research and who is familiar with the study context. He held sessions with the supervisor to discuss various aspects of the research process.

# **Inquiry Audit**

According to Polit and Beck (2004, p.435), "an inquiry audit involves a scrutiny of the data and supporting documents by an external reviewer." The researcher will establish an audit trail by keeping safely all the records pertaining to the study to enable a independent auditor to determine if the conclusions, interpretations and recommendations can be traced to their sources and if they are supported by the data. The records to be kept include raw data, data reduction products, data collection instrument, verbatim excerpts, and drafts of the report. Inquiry audit is used to establish dependability and confirmablity of qualitative studies (Polit & Beck, 2004). Polit et al., (2001) noted that even though auditing is a difficult task, it is an important tool for persuading others that qualitative data are worthy of confidence. The audit records will be availed to the supervisor when she asks for them.

# Thick descriptions

Thick descriptions "refers to a rich and thorough description of the research context in a qualitative study" (Polit et al., 2001). The researcher will provide a detailed description of the research setting or contexts and sufficient descriptions of data in the research report so that

consumers can decide whether or not they can generalize the study findings to their own contexts.

# Other Methods Used to Establish Trustworthiness of the Study Findings

In addition to Lincoln and Guba's criteria for establishing trustworthiness of qualitative studies, verbatim excerpts and the constant comparison method will be used to enhance the validity of study findings. Verbatim excerpts are typical responses of study participants. The report of the study will have verbatim excerpts from participants depicting major themes in order to enable the readers to make their own interpretation of the data and compare them with those of the researcher.

Constant comparison refers to the researcher constantly comparing the categories elicited from with the data obtained earlier in the data collection process so that commonalities and variations can be determined (Polit & Hungler, 1999). For instance, the researcher will compare responses of women to that of men to see whether there are any similarities or differences in the way CAM is used by men and women. Responses of participants from Kanye will be compared to those of participants from Gaborone to see whether there will be any similarities or differences in the way CAM is used by people in rural and urban areas.

# **Data Analysis**

The purpose of data analysis is to impose some order on a large body of information so that conclusions can be reached and communicated in a research report (Polit et al., 2001). Data collection and analysis are often done simultaneously in qualitative research (Polit & Beck, 2004) thus allowing the researcher to collect additional information if gaps are identified in the data (Dawson, 2006). In this study, simultaneous data collection and analysis will be done through the processes of constant comparison, member checking, and peer debriefing.

The researcher will transcribe verbatim from the tapes and translate the transcribed materials from Setswana to English. To verify the translated material, the English version will be back translated to Setswana by someone who has not seen the original Setswana version. The researcher will read the field notes and listen to the tape several times so as to get familiar with the data. According to Burns and Grove (2001), the researcher needs to be involved in reading and re-reading notes, transcripts and in recalling observations and experiences until he/she has a 'feel' of the data.

Demographic data will be analyzed using descriptive statistics. This will cover variables such as age, gender, education, employment status, duration of illness, cadre of conventional mental health care providers and their years of experience in working with mentally ill patients, years of experience for CAM providers, variety of CAM practitioners and their years of residence in Botswana, church affiliation, and locality. According to Burns and Grove (2001), descriptive statistics allow the researcher to organize the data in a meaningful way. Content analysis will be used to analyze the main research questions. Content analysis is "the process of organizing and integrating narrative qualitative information according to emerging themes and concepts" (Polit & Beck, 2004, p.467). In content analysis, data are categorized, usually according to categories established before data collection (Polit & Hungler, 1999). The next step involves identifying a unit of analysis which will be used to categorize the data into meaningful groupings (Burns & Grove, 2001; Polit & Hungler, 1999). This can be words, phrases, sentences or paragraph that make assertions about some topic (Polit & Hungler, 1999). In this study, sentences will be used as units of analysis.

Data will then be subjected to coding and development of categories. According to Burns and Grove (2001, p.708), "a code is a symbol or abbreviation used to classfiy or label

phrases in the data." Concepts from level 1 of Leininger's Sunrise Model will be used as a framework of categorizing the data. Burns and Grove (2001) and Stemler (2001) concurred that data can be coded into categories established prior to the analysis based on an existing theory. In analyzing the data, one question will be analyzed for all participants before moving to the next question. The two basic categories will be (a) patterns of CAM use in psychiatric care and (b) factors influencing patterns of CAM use in psychiatric care. These categories will be further broken down into subcategories depending on the findings. For instance, under patterns of CAM use, there may be a subcategory of reasons of CAM use. Relationships between and among categories will be explored; for instance, any similarities or differences in the use of CAM in rural and urban areas will be established.

The researcher will then share preliminary results findings with the participants to ensure that their viewpoints have been accurately interpreted. He will also keep all important documents so that any person who wants to check if the findings can be traced to their source can look at the documents.

#### **Ethical Consideration**

Permission to conduct the study will be sought from the Health Research Unit in the Ministry of Health. Permission will also be sought from the Ethical Review Committee of Princess Marina Hospital and Medical Superintendent of the Seventh Day Adventist Hospital where recruitment of patients and conventional mental health providers to participate in the study will take place. Finally, consent will also be sought from potential participants. The researcher will explain to each potential participant that the purpose of the study is to explore the use of CAM in psychiatric care. They will be informed that participation in the study is entirely voluntary and that those wishing to withdraw during the process of the study can do so without fear of

victimization. They will be informed that a tape-recorder will be used to record the interviews and that if they have reservations about the use of the tape, their wishes will be respected.

Potential participants will be informed that code numbers and not names will be used for identification purposes and that all information will be destroyed after the completion of the study. Furthermore, they will be informed that the information they give will not be used in anyway against them or reported in a manner that identifies them.

Participants will also be informed that there are no anticipated risks of participating in the study and that they will not receive any direct benefits for participating in the study, but that the findings of the study will assist mental health care providers to come up with strategies that can be employed to fully incorporate CAM into the mental health care services of the country. Those who consent will sign a written form while those who cannot write will append their right thumb prints.

# Limitations of the study

The qualitative nature and purposive technique used as well as the small geographical setting for the study limit the generalizability of the findings.

#### **Summary**

This explorative-descriptive study will be conducted in Kanye and Gaborone to explore and describe the use of CAM in psychiatric care. A semi-structured interview guide will be used to collect the data. Informants will be psychiatric patients, CAM practitioner, and conventional mental health providers. Informants' triangulation, member checking, peer debriefing, inquiry audit, thick description, verbatim excerpts, and the constant comparison method will be employed to establish trustworthiness of the findings. Descriptive statistics and content analysis will be used to analyze demographic data and the main research questions, respectfully.

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Appendix A

A Brief Description of the Study to Conventional Mental Health Care Providers

The Use of Complementary and Alternative Medicine in Psychiatric Care in Kanye and

Gaborone

I am a second year Master of Nursing Science student at the University of Botswana

currently working on my research project which is in partial fulfillment of the master's degree

program. The title of my research study is: the use of CAM in psychiatric care in Kanye and

Gaborone. I therefore invite men and women aged 21 and 65 years who have been diagnosed

with mental illness for at least a year to participate in the study. Participation involves use of

interviews conducted in Setswana lasting 30-45 minutes at a place and time convenient for them.

The findings of the study are expected to assist in improving mental health care services of the

country.

I can be contacted at:

The Department of Nursing Education

University of Botswana

Cell Number: 71703116

e-mail:ckebaitse@yahoo.co.uk

# Appendix B (1)

# CONSENT FORM (English Version)

# The Use of Complementary and Alternative Medicine in Psychiatric Care in Kanye and Gaborone

I am a Master of Nursing Science student of the University of Botswana conducting a study to explore the use of CAM in psychiatric care. I am, therefore requesting you to participate in the study. Participation involves use of interviews conducted in Setswana lasting 30-45 minutes at a place and time convenient for you. A tape recorder will be used to record the interviews. However, if you are uncomfortable with the use of a tape recorder your wish will be respected.

Participation in the study is voluntary, and you have the right to reverse your decision to participate at any time. Information you provide will be kept confidential and code numbers instead of names will be used for identification purposes. In addition, any publications arising from the study will not bear name of participating persons.

There are no anticipated risks for participating in the study. Also, there are no direct benefits for taking part in the study. However, the findings of the study are expected to improve the mental health care services in the country.

I have read this paper about the study or it was read to me. I know that participation in the study is voluntary, and I choose to participate. I understand that I am free to withdraw from the study at any time if I no longer want to take part.

Participant's Name	Signature	Date
Study explained by:	Signature	Date

# Appendix B (2)

# **CONSENT FORM (Setswana version)**

Setlhogo sa Patlisiso: Tiriso ya Kalafi e e Seng ya Sepatela mo go Alafeng Malwetse a

Tlhaloganyo mo Kanye le Gaborone.

Ke moithuti wa dithuto tsa booki tse di kgolwane (Master of Nursing Science) kwa Unibesithi ya Botswana. Ke dira patlisiso wa Kanye le Gaborone ka tiriso ya kalafi e e seng ya sepatela e e dirisiwang go alafa malwetse a tlhaloganyo. Ke eletsa go buisanya le Bomme le Borre ba dingwaga tse 21 le go feta ba ba kile ng ba kopa thuso mo bongakeng jo e seng jwa sepatela go alafa malwetse a pelo/tlhaloganyo; le ba ba alafang malwetse a gonna jalo ka ditsela setso le tse dingwe. Mme gape ke eletsa go buisanya le bone ba ba alafang malwetsei a pelo/tlhaloganyo ka sekgowa/sepatela go utlwa maikutlo a bone ka kalafi e e seng ya sepatela. Go tsaya karolo go akaretsa puisanyo e e tla tshwarwang ka Setswana e tsaya metsotso e le masome a mararo go ya go masome a mane le botlhano. Puisanyo e tla gatisiwa ka se kapa mantswe, mme fa o sa batle puisanyo ya gago e gatisiwa, maikutlo a gago a tla a obamelwa.

Go tsaya karolo mo patlisisong e ga go pateletswe, e bile motho yo o dumetseng go tsaya karolo o ka fetogela tshwetso ya go nna jalo. Dikarabo tsa gago di tla nna sephiri ka jaana leina la gago le se nke le supiwa fa dikarobo tsa gago di kwadilweng teng.

Ga ke bone fa go na le diphatsa tse di ka go tlhagelang ka mabaka a go tsenelela patlisiso e. Ga o na go duelelwa go tsenela patlisiso; mme gone maduo a patlisiso e a solofetswe go tokafatsa ditirelo tsa kalafi ya botsogo jwa tlhaloganyo mo Botswana.

Fa o dumela go tsenelela patlisiso e, ke kopa gore o dire jalo ka mokwalo le sekano sa ga gago mo pampiring e.

Nna (leina le sefane) ke dumalana go tsenelela patlisiso e,
jaaka fa ke tlhaloseditswe ka yone ke Ke tlhaloganya gore ga
ke patelediwe go tsenelela patlisiso e, le gore dikarabo tsa me ga dina go amanngwa le leina
lame.
Sekano sa me Letsatsi
Leina la mmatsolosiLetsatsi

# Appendix C

# PARTICIPANT'S CONTACT FORM

Name of Recruiting Person:DateDate
Respondent's Name Name of Facility
Category of Informants: Patients/ CAM Providers/Conventional Mental Health Care Providers
Number of Year Diagnosed with mental Illness/treating mental illness
Town/Village of Residence:
Respondent's Gender: 1. Male 2. Female
Physical Address: Ward/Ext/Block:
House Number:
Nearby prominent Building:
Telephone Number (Work) (Home) (Cell)

# Appendix D (1)

University of Botswana

Private Bag 0076, Gaborone

Date

Health Research Unit

Ministry of Health

Private Bag 0038, Gaborone

U.f.s Head of Department, Nursing Education-----

# RE: Request for Permission to carry out a Research Project

This is a request for permission to carryout a research study entitled: The use of Complementary and Alternative Medicine in Psychiatric Care in Kanye and Gaborone.

Participants of the study will be mentally ill patients in the community, CAM practitioners who treat mental illness as well as Conventional Mental Health Care Providers. The researcher believes that the findings of the study will assist in improving mental health care services of the country.

Hoping the request will be favorably considered.

Thank you

Yours faithfully

Dear Sir/Madam

Clark Kebaitse

MNSc student, department of nursing

Cc, Coordinator MNSc Program

Department of Nursing Education

The Dean

School of Graduate Studies

Attached are:

Summary of the proposal

Data collection tools

Consent form

Budget of the study

Time line

#### Appendix D (2)

University of Botswana
Private Bag 00706, Gaborone

Date

Medical Superintendent

Seventh Day Adventist Hospital

P.O. Box 11, Kanye

Ufs. Head, Department of Nursing Education-----

Dear Sir/madam

#### RE: Permission to carryout a Research Project

I am a second year Master of Nursing Science student at the University of Botswana. I am currently working on my research project, which is in partial fulfillment of the Master's degree program. I am therefore requesting permission to use your facility (out-patient department) to recruit patients and staff to participate in the study. The title of the study is: The use of Complementary and Alternative Medicine in Psychiatric care in Kanye and Gaborone.

Your cooperation will be highly appreciated

Thank you

Yours faithfully

Clark Kebaitse

Cc Coordinator, MNSc program

Department of Nursing Education

#### Appendix D (3)

University of Botswana

Private Bag 00706, Gaborone

Date

Ethical Review Committee

Princess Marina Hospital

P.O. Box 258, Gaborone

Ufs. Head, Department of Nursing Education----

Dear Sir/madam

#### RE: Permission to carryout a Research Project

I am a second year Master of Nursing Science student at the University of Botswana. I am currently working on my research project, which is in partial fulfillment of the Master's degree program. I am therefore requesting permission to use your facility (psychiatric Unit) to recruit patients and staff to participate in the study.

The title of the study is: The use of Complementary and Alternative Medicine in Psychiatric care in Kanye and Gaborone.

Your cooperation will be highly appreciated

Thank you

Yours faithfully

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Clark Kebaitse

Cc Coordinator, MNSc program

Department of Nursing Education

# Appendix E (1)

# Interview Guide for Patients (English version)

Respondent's code number
Section A: Demographic data
1. Name of facility: (a) Seventh Day Adventist (b) Princess Marina
2. <b>Age:</b> (a) 21-30 (b) 31-40 (c) 41-50 (d) 51-60 (e) over 60
3. Gender: 1. Male 2. Female
4. Church Affiliation (if any)
5. Educational status: (a) No school (b) Literacy (c) Primary (d) Secondary
(e) Tertiary
6. Employment Status: (a) Formally Employed (b) self-employed (c) not employed
7. Number of years diagnosed with mental illness
Section B
You may have heard a lot in radios, television or read in newspapers and other resources about
the use of traditional medicine b many Batswana to treat their health problems. I wish to hear
what your experiences, observations and opinions have been with regard to the use of traditional
medicine. My focus is particularly in the treatment of mental illness. Please feel free to tell me
what you think of this form of treatment, does it work? under what circumstances does it work:-
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	i e e e e e e e e e e e e e e e e e e e	<b></b>		
			4	
<b></b> .				
1. Can you tell me why you	choose to use tradi	tional medicine	to treat mental illi	ness:
		,		
2. Can you please tell me th	e circumstances un	der which you ha	ave preferred con	ventional mental
health services over traditio				
			4	
3. What do you do to get th	e best benefit from	using the two tre	eatments:	

4. What types of practit	ioners do you usuall	y seek?:		
, .,				
			(E) (A) E	
			***********	
. Any other suggestion	or opinion you woul	ld like to share	with me?:	

# Appendix E (2) Interview guide for patients (Setswana Version)

Nnomore ya mo tsaya karolo-----

Karolo ya ntlha	ı				
1. Leina la Sepa	atela: (a) Sev	venth Day Ad	ventist (b)	Princess Marin	na
2. Dingwaga:	(a) 21-30	(b) 31-40	(c) 41-50	(d) 51-60	(e) over 60
3. <b>Bong</b> : (a) Rre	(b) Mme				
4. Kereke e o e t	senang (fa ele	teng)			
5. Seemo sa thu	ito: (a) Ga ke at	tsena sekolo	(b) Sekolo se s	e botlana (c)	Se kolo se se
golwane (d) Se	ekolo sa ithutel	o tiro			
6. Itshetso: (a)	Molime-morui	(b) moheriv	va (c) moiphi	ri (d) Ga ke b	oereke
7. O nale lobaka	lo lo kae ba bot	tsogo ba tshw	ere bolwetsie jv	va tlhaloganyo	
Karolo ya Babe	di				
O ka tswa o utlw	/aletse mo radio	ong, television	kana o badile	mo dipampirin	g tsa dikgang ka
tiriso ya kalafi ee	seng ya sepate	le ke Batswar	a go alafa malv	wetse a a farolo	oganyeng. Ke eletsa
go utlwa maikutle	o le megopolo y	ya gago mabaj	pi le tiriso ya ka	alafi e mme re	remeletse mo
malwetseng a th	aloganyo. Gold	olesega go bua	a ka kalafi e, sel	kai, a e a berek	a, fa e bereka, e
bereka mo mabak	ceng a fe jalo ja	lo:			
					·································

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A
**************************************
1. Fa e le gore o dirisa kalafi e e seng ya sepatelo, o ka mpolela gore thata mo go yone o okwa
ke eng, mme fa ele gore ga o e dirisi kgotsa o dirisa tsa sepatela fela, mabaka ke eng?:
00-20-00-00-00-00-00-00-00-00-00-00-00-0
2. Fa o lebeletse kalafi ya sekgowa le tse e seng tsa sekgowa, o kare o bona ya sekgowa e
2. I'a o icocicise kaiaii ya sengowa ic ise e seiig isa sengowa, o naie o bolia ya sengowa e
nonofile fa kae, mme e le bokoa fa kae, Tse e seng tsa sekgowa tsone o bona di nonofile fa kae
22-2
mme di tlhaela fa kae?
3. A o ka mpolelela ditsela tse o di dirisang gore o sologelwe molemo ke kalafi ya sekgowa,
mme ya setso le tse dingwe dintse le tsone di go sologele molemo?:

. E re ka ka	lafi e e seng ya sepatela	a e na le mehuta e e farologany	eng, o dirisa mehuta e fe?:-
			(%)
A go nale s	engwe gape se o eletsa	ng go bua ka sone kwa ntle ga	tse re setseng re buile ka
one?:			
	*		

## Appendix E (3)

## Interview Guide for CAM Practitioners (English Version)

Respondent's Code Number
Section A
<ol> <li>Name of Town/Village: (i) Gaborone (ii) Kanye</li> <li>Original home village/town if different from 1</li> </ol>
3. Number of years residing in Botswana if not a local
4. Age (i) 21-30 (ii) 31-40 (iii) 41-50 (iv) 51-60 (v) Over 60 5. Gender: (i) Male (ii) female
6. Church Affiliation (if any)
7. Educational Level: (i) No school (ii) Primary (iii) Secondary (iv) Tertiary
8. Type of CAM practitioners
(a) Spiritual healer (b) Herbalist (c) Sangoma (d) Bone throwers
(e) Others (specify)
9. Number of years as traditional medicine practitioner
Section B
There has been a call for a closer cooperation between CAM practitioners and conventional
health care practitioners.  I wish to hear what your experiences, observations and opinions have
been with regard to the use of CAM. My focus is particularly on the treatment of mental illness.
Please feel free to tell me what you think of this form of treatment, does it work? Under what
circumstances does it work? Any success stories, challenges and problems

######################################
9. What types mental illnesses do you treat?
,
10. What are the nature of people who come for your services?
11. What do you think can be done to improve the working relationship between conventional
mental health care providers and CAM practitioners?

12. Any other suggestion/s or opinion/s	you would like t	o share with me?	
		· ·	
A	,		
، الله 10 و باران و			
			7444-6-4
13. What does one need for you to assist	him/her?		
	1		
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## Appendix E (4)

## Interview Guide for CAM Practitioners (Setswana version)

Nnomore ya mo tsaya karolo
Karolo ya Ntlha
<ol> <li>Leina la Motse/toropo: (a) Gaborone (b) Kanye</li> <li>Motse/toropo e o tlholegang kwa go jone fa e harologana le e e fa godimo</li> </ol>
3. Dingwaga o nna mo Botswana fa o se Motswana
4. <b>Dingwaga</b> (i) 21-30 (ii) 31-40 (iii) 41-50 (iv) 51-60 (v) Over 60 5. <b>Bong:</b> (i) Rre (ii) Mme
6. Seemo sa thuto: (i) Ga ke a tsena sekolo (ii) sekolo se se botlana (iii) Sekolo sese
golwane (iv) Sekolo sa ithutelo tiro
7. Kereke e o e tsenang (fa e le teng)
8. Boremelelo jwa dithuso tsa gago (a) Moporofite (b) Go thusa ka ditlhatsana tsa kalafi
(c) Sangoma (d) Tiriso ya ditaola
e) Tse dingwe (tlhalosa ka botlalo)
9. O nale lobaka lo lo kae o alafa malwetse a tlhaloganyo
Karolo ya Bobedi
Goromente o ntse a rotloetsa tirisano fa gare ga bongaka jwa sepatela le jo e seng jwa sepatela.
Ke eletsa go utlwa makutlo le megopolo ya gago mabapi le tiriso ya kalafi e, e e farologanyeng
le ya sepatela, re remeletse mo malwetsing a tlhaloganyo. O ka mpolela ka bopara se maikutlo a
gago e leng sone ka kalafi ya gonna jaana. Dikai, e bereka mo mabakeng afe, dikgwetlho tse di
leng teng mo go diriseng, le mathata fa a le teng, jalo jalo

######################################
1. O alafa mehuta e fe ya malwetse a tlhaloganyo?(tlhalosa ka botlalo)
2. Gantsi batho ba ba tlang kwa go wena go kopa thuso ke ba ba ntseng jang? Dikai, a ke
Borre, Bomme, bana bagodi, bahumi, ba ba itlhaelang dikobo, ba o agileng le bone, ba ba
tswang kgakala, kgotsa ba ba tswang kwa mafatsheng a sele jalo jalo
2 Observation discuss and the Constitution was baloff a la balation asset land recovery
3. O bona go ka dirwa eng go tokafatsa tirisanyo ya kalafi e le kalafi ya sepatelasekgowa?
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

4. A go nale sengwe gape se o eletsang go bua ka sone fa godimo gat se re setseng re buile ka
tsone?
######################################
5. Motho o tlhoka gore a bo a nale eng gore a bone thuso ya gago? Dikai, a Mme ka tla Rre a sa
itse, kgotsa ngwana a tla batsadi bas a itse, dituelo le ditebogo, le tse dingwe tse moth o
tlamegang go di dira jalo jalo
Ke a leboga

## Appendix E (5)

## Interview Guide for Conventional Mental Health Care Providers

Respondent's Code Number
Section A
1. Name of facility (a) Princess Marina Hospital (b) Seventh Day Adventist Hospital
2. Age (a) 21-30 (b) 31-40 (c) 41-50 (d) 51-60 (e) Over 60
3. Gender (a) Male (b) Female
4. Church Affiliation (if any)
5. Cadre: (a) Psychiatric nurse (b) General Nurse (c) Psychiatrist (d) Medical Officer
(e) Social welfare Officer
6. Number of years working with psychiatric patients
Section B
Government of Botswana has long advocated for a closer cooperation between traditional
medicine practitioners and the conventional health care providers as many Batswana still use TM
for the prevention and treatment of various health problems. I wish to hear from you regarding
this issue particularly the use of TM to prevent and treat mental illness

7. Have you ever encountered problems with patients in their use of TM?	
8. What do you think can be done to improve the working relationship between tradition	nal
medicine practitioners and conventional mental health care providers?	
,	

Appendix F

#### RESEARCH PROJECT BUDGET

BUDGET CATEGORY	UNIT COST/MULTIPLYING FACTOR	TOTAL COST
A. STATIONERY	6* P40	P240.00
A4 photocopying papers	4*P35	P140.00
Lined papers	06* <b>P</b> 3	P18.00
Ball Point Pens	2*P2	P4.00
Pencils		
Rubber	2*P2	P4.00
Notebook	1*P12	P12.00
Tape recorder	1*P350.00	P350.00
Batteries	6 pairs *P8.00 each battery	P96.00
Memory sticks	2*P200.00 each	P400.00
Tape cassettes	20 *P10	P200.00
Sub Total		P1476.00
B. TYPING		
	c +*D10.00 1-44	DC0.00
6Permission letters to conduct research	6 pages at *P10.00 per letter	P60.00
Final research proposal	75 pages at *P10.00 per page	P750.00
Interview Guide-for pilot study and for research	5 pages at *P10.00 per page	P50.00
Corrections on the Final Research Project	100 pages at *P3.00 per page	P300.00

	T	D1160.00
TYPING TOTAL		P1160.00
C. PHOTOCOPYING	6 copies *P1.00 per page	P60.00
Permission letters	8 copies*75 pages at P1.00 per page	P720.00
Final Research Proposal	5 *5 pages at P1.00 per	P25.00
Interview Guide-for pilot study	page	
	15 * 5 pages at P1.00	P75.00
For research		P826.00
PHOTOCOPYING TOTAL		
D. TRANSPORT AND MEALS		
Pilot study Return trip from UB to Princess Marina Hospital	P2.50 *2*3 days	P15.00
Meals	P30*3 days	P90.00
Research Project Return trip from UB to Kanye	P25.00 *10 days	P250.00
Return trip from UB to Princess Marina Hospital	P5.00 *10	P50
Meals for Research Project	P30 per day * 20 days	P600.00
TRANSPORT AND MEALS TOTAL	-	P1005.00
E. BINDING	8 copies *P80	P640.00
Research Proposal	8 copies *P80	P640.00
Final Research Project		P1240.00
BINDING TOTAL		

	P5707.00	
	P570.7	
	P6277.7	
		P570.7

## Appendix G

#### TIME LINE

Activity	Time Period	Number of Weeks
Proposal development	2 <sup>nd</sup> weekJan-4 <sup>th</sup> Week April, 2007	17
Permission from Research Unit	1 <sup>st</sup> week May-2 <sup>nd</sup> week May	2
Testing of tool	3 <sup>rd</sup> week May	1
Permission from Marina and Seventh Day Adventist hospitals	4 <sup>th</sup> week May-5 <sup>th</sup> week May	2
Data collection	1 <sup>st</sup> week June-3 <sup>rd</sup> week June	3
Data analysis	4 <sup>th</sup> weekJune-3 <sup>rd</sup> week July	4
Reporting writing	4 <sup>th</sup> July-3 <sup>rd</sup> week August	4
Submission	4 <sup>th</sup> weekAug-5 <sup>th</sup> week Aug	2
Final corrections	1 <sup>st</sup> week Sep	1
Binding	2 <sup>nd</sup> week Sep -3 <sup>rd</sup> week Sep	2
Total number of weeks		37

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